Remarks

A Request for Continued Examination accompanies this Amendment (NOT INCLUDED WITH DRAFT).

Claims 23-56 are pending in the application following entry of this Amendment. Claims 1-22 have been canceled. Claims 23-56 have been added. Claims 23, 51, and 55 are the only independent claims pending. For the Examiner's convenience, the following table indicates the canceled claims to which the newly added claims are believed to most closely correspond.

Approximate Claim Correspondence

Old Claim#	New Claim #	Old Claim#	New Claim #	Old Claim #	New Claim #
1	23	9	-	17	38
2	24	10	30	18	39
3	25	11	31	19	-
4	-	12	33	20	41-50
5	26	13	34	21	<u>-</u>
6	27	14	-	22	_
7	28	15	35,36	-	32,51-56
8	29	16	37	•	

No new matter is added by the amendments and additions made herein. Support for the amendments to these claims is found in the specification as follows.

Amendments made to the paragraph bridging pages 4 and 5 of the specification merely correct obvious grammatical and spelling errors.

Each of newly added claims 23-50 is believed to be supported by at least the claims as filed, by page 3, line 17, through page 5, line 6, and by page 5, line 29, through page 7, line 14, of the specification. Claims 51-53 are supported by the structures shown atop page 8 of the specification. Claims 54 is supported by the structure of compound (1) on the top of page 9 of the specification. Claims 55 and 56 are supported by the structures of compounds (10) and (11) on page 14 of the specification.

In claim 26, decarboxylases, glucokinases, glutathionases, hexokinases, and mannosidases have been added to the claims. The Examiner had previously objected to inclusion of these enzymes in claim 5, because claim 1 (from which claim 5 depended) recited hydrolysis and these enzymes do not catalyze hydrolysis. Claim 23 (from which claim 26 depends) does not recite hydrolysis, and so the Examiner's previous objection (Paper No. 6, page 3, first paragraph) regarding lack of antecedent basis. The Examiner had previously (Paper No. 6, page 3, second paragraph) questioned whether glutathionase is an enzyme. The Applicant respectfully contends that the enclosed entry from the Online Mendelian Inheritance in Man (OMIM) database for the disorder glutathionuria demonstrates that there is a class of enzymes known as glutathionases. Each of the enzymes added to claim 26 is disclosed in the specification at page 4, lines 17-26. The Applicant respectfully contends that the enclosed Google search engine result set (obtained using the HotBot search engine AND NOT ENCLOSED WITH DRAFT) demonstrate that "manosidase" is an obvious misspelling of the enzyme correctly spelled "mannosidase."

Compliance with Previous Restriction/Election Requirements

In the restriction / election requirement issued 16 July 2002 (Paper No. 2), the Examiner required election of a single species of enzyme. The enzyme species, 'phosphatase' was elected. Claims 23-41 and 51-55 read on this elected species.

In the restriction / election requirement issued 16 July 2002 (Paper No. 2), the Examiner required election of a single species of 'targeting molecule.' The targeting molecule species, 'antibody' was elected. Claims 23-29 and 32-56 read on this elected species.

In the restriction / election requirement issued 16 July 2002 (Paper No. 2), the Examiner required election of a single species of R¹ moiety. The R1 moiety species, 'gamma emitter' was elected. Claims 23-36 and 41-56 read on this elected species.

In the restriction / election requirement issued 16 July 2002 (Paper No. 2), the Examiner required election of a single species of 'BLOCK' (roughly corresponding to the "prosthetic

group" recited in the presently pending claims). The BLOCK species 'phosphoric acid or sulfuric acid' was elected. Claims 23-42 and 51-55 read on this elected species.

In the restriction / election requirement issued 28 October 2002 (Paper No. 4), the Examiner required election of a single species of either 'endogenous enzyme' or 'gene therapy induced enzyme.' The species 'endogenous enzyme' was elected. Each of claims 23-56 reads on the elected species.

In view of the restriction / election requirements and the elected species, each of claims 23-29, 32-36, 41, and 51-55 read on all elected species. Claims 30, 31, 37-40, 42-50, and 56 stand withdrawn from consideration, are believed to be subordinate to generic linking claims, and are maintained pending possible rejoinder. The Applicant believes that each of claims 23-29, 32-36, 41, and 51-55 should be examined on the merits, and that each of claims 30, 31, 37-40, 42-50, and 56 should be rejoined and examined on the merits in the event the corresponding linking claim is found to be allowable in view of the elected species.

Each of the Examiner's objections or rejections is addressed below in the order they were presented in Paper No. 36.

Rejection Pursuant to 35 U.S.C. § 102(b) in View of Hansen

The Examiner rejected claims 1, 5-15, and 17-20 pursuant to 35 U.S.C. § 102(b) in view of Hansen (U.S. Patent No. 5,851,527). In the Examiner's view (see Paper No. 6, beginning on page 3), Hansen discloses methods of treating a tumor using an enzyme-antibody complex localized to the tumor to convert a soluble prodrug to an insoluble drug which is deposited and accretes at the tumor site.

ARGUMENTS RELATING TO CLAIMS 1, 5-15, AND 17-20 WILL BE
DISCUSSED ORALLY DURING THE INTERVIEW. COMMENTS REGARDING THE
RELEVANCE OF THIS REJECTION TO NEW CLAIMS 51-56 APPEAR BELOW.

With regard to independent claims 51 and 55, Hansen does not disclose the structure recited in either of those claims. Hansen fails to anticipate any of claims 51-56 for that reason alone.

Rejection Pursuant to 35 U.S.C. § 102(e) in View of Griffiths

The Examiner rejected claims 1, 5-15, and 20 pursuant to 35 U.S.C. § 102(b) in view of Griffiths (U.S. Patent No. 6,361,774). In the Examiner's view (see Paper No. 6, beginning on page 4), Griffiths discloses methods of treating a tumor using an enzyme-antibody complex localized to the tumor to convert a soluble prodrug to an insoluble drug which is deposited and accretes at the tumor site.

ARGUMENTS RELATING TO CLAIMS 1, 5-15, AND 20 WILL BE DISCUSSED ORALLY DURING THE INTERVIEW. COMMENTS REGARDING THE RELEVANCE OF THIS REJECTION TO NEW CLAIMS 51-56 APPEAR BELOW.

With regard to independent claims 51 and 55, Hansen does not disclose the structure recited in either of those claims. Hansen fails to anticipate any of claims 51-56 for that reason alone.

Rejection Pursuant to 35 U.S.C. § 103(a) Over Hansen in View of Senter, Shepard, Camden, Griffin, and Horwitz

The Examiner rejected claims 1-3 and 5-20 over Hansen in view of one or more of Senter, Shepard, Camden, Griffin, and Horwitz.

ARGUMENTS RELATING TO CLAIMS 1-3 AND 5-20 WILL BE DISCUSSED ORALLY DURING THE INTERVIEW. COMMENTS REGARDING THE RELEVANCE OF THIS REJECTION TO NEW CLAIMS 51-56 APPEAR BELOW.

As explained above, neither Hansen nor Griffiths discloses either of the chemical structures recited in independent claims 51 and 55. Similarly, none of the Senter, Shepard, Camden, Griffin, and Horwitz references discloses these structures, either.

Camden discloses certain benzimidazole compounds (structure below left) that differ from the structure recited in independent claim 55 (structure below right) at least in inclusion of an additional nitrogen atom in the five-membered ring.

$$R_2$$
 R_2
 R_2
 R_2

Griffin discloses certain quinazolinone compounds (structure below left) that differ from the structure recited in independent claim 51 at least in that R¹ in the structure recited in claim 51 is either a hydrogen radical, a radionuclide, and a boron cage. Griffin does not disclose that X' can be any of these moieties.

$$R^1$$
 R^3
 R^3

The Applicant respectfully contends that no combination of the Hansen, Griffiths, Senter, Shepard, Camden, Griffin, and Horwitz references suggest or disclose the structures recited in claims 51 and 55, and that none of these references renders obvious any of claims 51-56.

Summary

For the reasons set forth above, the Applicant respectfully contends that each of claims 23-56 is in condition for allowance. Reconsideration and withdrawal of each of the Examiner's rejections are requested, and the Examiner is requested to issue a Notice of Allowance at the earliest possible time.

	Respectfully submitted,
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Petition for a Three-Month Extension of Time

Google search results